

STATE OF THE CLAIMS

In the present application, Claims 1, 3, and 7-14 were pending in the application, all of which were rejected by the Examiner. Applicant has herein deleted Claims 1, 3, 7-9 and 12-14, amended claims 10-11 and added new Claims 15-23.

REMARKS

First of all, the Applicant would like to thank the Examiner for the time taken and courtesies extended in the telephonic interview of June 30, 2003. In that interview, the Examiner explained the bases for rejecting the present invention, and his thoughts on the form and substance of the present claims. The Examiner expressed concern over the overall language informalities contained within the claims, and asked for correction of those problems, along with some minor formatting issues with the application itself.

Thus, as to the Examiner's formal rejections, the Examiner noted that the specification included specific reference to the claims, and asked that those references be removed. Additionally, the Examiner noted that all U.S. Applications need to include an abstract on a separate sheet of paper.

In response, Applicant has amended the specification to remove any specific reference to the claims. As to the abstract issue noted by the Examiner, Applicant notes that, on Page 5 in the last office action response sent on January 28, 2003, an abstract was added on new Page 11 of the specification. Therefore, Applicant submits that the Examiner's formal questions relative to the specification have been addressed.

The Examiner has rejected all of the present claims under 35 U.S.C. §103(a), based on the contention that they are unpatentable over either U.S. Patent Nos. 5,387,304, issued to Berner

at al (Berner), or 5,254,192, issued to Speakman (Speakman), either alone or in combination with U.S. Patent No. 5,741,591, issued to Tashiro et al (Tashiro). Applicant continues to traverse the Examiner's rejection. The Examiner's rejection has taken on several forms. In the Office Action mailed on March 17, 2003, the Examiner stated that the claims of the present application created a "product-by-process claim," wherein the final product did not define over the prior art. Alternatively, in that same Office Action, the Examiner stated that Tashiro disclosed paint-containing microcapsules, and that those microcapsules would render the present invention obvious.

In the telephonic interview of June 30, 2003, however, the Examiner explained that the claims did not show a product-by process claim, but instead disclosed a "kit." The Examiner appeared to be stating that the claimed language disclosed separate known structures, namely microcapsules and adhesive, that were simply added together to form the claimed invention. This explanation, of course, does not describe the intended impact of the present claim language.

The Examiner, however, provided a possible explanation for why there were two different explanations provided for the rejection. In the June 30, 2003, interview, the Examiner stated that the claim language was vague and ambiguous, and would require further clarification before allowance could be achieved. Thus, Applicant believes that a misunderstanding of the claimed subject matter of the present invention could be leading to multiple rejections of the present application, by prior art that does not directly apply to the invention. Therefore, Applicant has reviewed the claims, and amended them to further clarify the claimed invention.

Specifically, Applicant has deleted former independent Claim 1, and has added Claim 15 to clarify the claimed scope of the present invention. Claim 15 states that the invention includes a repair material having a deformable layer of microcapsules that are bound together by a

binding agent, and a layer of adhesive associated with the deformable layer. The microcapsules have a wall material, and powdered paint particles encapsulated within the wall material. Finally, the wall material and the binding agent decompose upon application of heat. Through this configuration, the present invention is capable of being applied to any number of surfaces, including the bent three-dimensional surface of a car, to repair the painted surface by the simple application of heat.

As was noted by the Examiner, neither Speakman nor Berner disclose the use of a deformable microcapsule layer. Instead, Speakman discloses a process for obtaining a color match for a painted surface, in which a coating of paint is applied to a flexible plastic substrate, which is in turn coated on its back side with a pressure sensitive adhesive layer. Similarly, Berner discloses a method for applying a painted carrier film to a three-dimensional substrate, wherein the carrier film is coated on one side with a radiation curable paint, and on the other side an adhesive. To apply the carrier film, Berner discloses heating the carrier film, and applying it by deep drawing. Thus, both references disclose the use of a pliable (either heated or non) substrate, and paint applied directly thereto.

As can be seen, these references rely on the same principle for operation. The flexible substrate is prepared with an actual paint layer, and then applied to the substrate. Depending on the state of the paint layer upon application, this can cause a number of problems, including cracking of the paint layer, color deformities due to stretching, uneven application due to stretching or due to the general application shape of the carrier film, and lack of a flush application due to the existence of multiple layers of material.

Many of these issues are resolved through the use of a degradable layer of microcapsules that contain paint, as claimed in the present invention. The presently claimed invention

comprises a deformable material that can be applied flexibly to a substrate (similarly to Speakman and Berner), but which can thereafter be used to directly and in a closely conforming manner apply a newly formed paint layer to the layer of paint to be repaired. The structure disclosed in Claim 1 includes a deformable layer of microcapsules and a binder, and an adhesive layer, wherein the deformable layer and the binder decompose upon application of heat. Upon application of such a device, and after applying heat, the microcapsules and binder decompose, forming a new layer of paint on the site to be repaired. This new layer conforms closely and directly to the three-dimensional surface, providing a clean, conforming paint repair. Thus, the present device provides an improved repair material that is not taught, disclosed or suggested by either Berner or Speakman.

The Examiner relies upon Tashiro to teach the use of microcapsules for the delivery of paint. Although Applicant acknowledges that Tashiro teaches microcapsules that contain paint, there is no suggestion in either Berner or Speakman that would lead one of ordinary skill in the art to look to the microcapsules of Tashiro.

Specifically, both Berner and Speakman solely disclose the application of paint to the flexible substrate material through spraying. In fact, the flexible substrate is either already painted, or is painted after application via spraying it with paint. There is no suggestion of using any other method of paint application in either reference, nor would such a suggestion be logical. Simply stated, the methods of application of the repair material in both Berner and Speakman rely upon the flexibility and moldability of the substrate itself, which would be hampered by the application of a microcapsule layer to that structure. Thus, the use of a spray on paint material in both references is both logical and complete in and to itself.

The present application, on the other hand, foregoes the need for a flexible substrate material, and instead relies on a flexible layer of microcapsules and binder, which may then be directly and conformably converted into a repair paint layer. Thus, although microcapsules make perfect sense within the context of the present invention, such a combination would be completely unnecessary in Berner or Speakman, and in fact would frustrate the purpose of both inventions.

Based on the above, Applicant submits that the presently claimed invention is not taught, disclosed or suggested by any of the prior art references. Therefore, Claims 10-11 and 15-23 should now be in condition for allowance. Therefore, reconsideration and passage to allowance of all of those claims is respectfully requested.

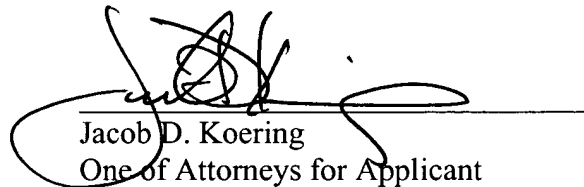
Before the Examiner takes any substantive action on the present file, however, Applicant would respectfully request the courtesy of a personal interview regarding the above claimed invention, and the differences between the present claims and the cited art. Therefore, a telephone call to the undersigned at the Examiner's earliest convenience would be greatly appreciated.

Should anything further be required, a telephone call to the undersigned, at (312) 226-1818, is respectfully invited.

Respectfully submitted,

FACTOR & PARTNERS, LLC

Dated: September 17, 2003



Jacob D. Koering
One of Attorneys for Applicant

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on September 17, 2003.

Jacob D. Koering

